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K Duncan  
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PATENT APPLICATION  
Do. No. 1482-129

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Barrie Gilbert

Serial No.: 09/675,902

Examiner: Tung X. Nguyen

Filed: September 28, 2000

Group Art Unit: 2829

For: GAIN AND PHASE DETECTOR HAVING DUAL LOGARITHMIC  
AMPLIFIERS

Date: August 5, 2002

Assistant Commissioner for Patents  
Washington, DC 20231

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ON Aug 5, 2002

*J. Mah*

RESPONSE TO OFFICE ACTION

Responsive to the Office Action, dated March 5, 2002, please amend the application  
as follows.

08/20/2002 HTECKLU1 00000001 131703 09675902

01 FC:116 400.00 CH

In The Specification

Please replace the paragraph beginning on page 3, line 3 with the following:

91 "Log amp 10 will be referred to as part of channel A, which receives the input signal  $V_A$  and generates the logarithmic output signal  $V_{OUT\_A}$ . Likewise, log amp 12 will be referred to as part of channel B, which receives the input signal  $V[B]_B$  and generates the logarithmic output signal  $V_{OUT\_B}$ . For purposes of illustration, the signals utilized in Fig. 4 are shown as single-sided voltages, but the present invention can be realized with differential voltage signals, differential or single-sided current mode signals, or any convenient combination thereof. The logarithmic output signals  $V_{OUT\_A}$  and  $V_{OUT\_B}$  are given by following equations:"

08/16/2002 HTECKLU1 00000005 131703 09675902

01 FC:103 18.00 CH  
02 FC:102 672.00 CH

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